

# Brabazon Arena

Action Log – 27<sup>th</sup> March 2018

Updated 11<sup>th</sup> April 2018

## Transport Strategy:

- **General**

- YTL to confirm the proposed number of events annually, the timing and sizes. This is to assist the transport people to understand what they are going to have to deal with!!

YTL has confirmed that they are assuming the following numbers of people and events over the first five years:

- Annual attendees 600k year 1 rising to 1.3m by year 5

Proposed event numbers:

- 2022 – 75 events
- 2023 – 90 events
- 2024 – 110 events
- 2025 – 130 events
- 2026 – 140 events on-going

20 – 30% of these will be the large events (16,000)

- Agree the split before and after the Park and Rides are operational with SGC, BCC, YTL, The Mall, First and GWR:
  - Before – Use The Mall and YTL's site for parking
  - After – Use the Park and Rides and ensure extra buses and trains are available
  - It has been agreed that this simplistic approach is not going to be acceptable due to extra traffic movements at the M5 junctions.
  - NG has developed a menu of possible mitigation measures and it is to be confirmed, by both BCC and SGC, that they will work together to put develop a selection of these mitigation measures to service the arena. These will change over time.
- YTL is producing a breakdown of the likely methods of transport, based on their experience and supportable information from other Arenas and GWR. This will be used to inform the CH2M transport study

- **Metro Bus (ii):**

- Get a letter of confirmation from SGC stating that funding is in place, the arrangement with NR finalised and the proposed completion date. **Still awaited.**
- Get a letter of confirmation from YTL stating when the agreed MetroBus (ii) works will be completed on site. **Still awaited.**
- Get a letter of confirmation from First stating that they will provide extra buses before and after the Arena events. **Still awaited from [REDACTED] – First Group**

- **Metro West (ii):**

- Get a letter of confirmation from SGC, specifically in relation to the North Filton to Temple Meads service, stating that funding is in place, the arrangement with NR finalised and the proposed completion date. **Still awaited.**
- Get a letter of confirmation from YTL confirming that they will design, fund and build the Filton North station to cope with the passengers visiting the Arena. Also get confirmation of the completion date for the station, from YTL. **Still awaited.**
- Discuss with SGC and NR the costs and timescale for installing the infrastructure now for a half-hourly service. At present the scope is to provide an hourly service between North Filton and Temple Meads
- Get a letter of confirmation from GWR stating that they will provide extra train services before and after the Arena events. **Supporting email received from GWR ([REDACTED])**

- **Rail link between Filton North and Parkway:**

- At present this is not in the agreed works
- There is an estimated price of £15m for the works being discussed, but I do not think this is supportable. NR do not
- Discuss and agree the scope of works for a high-level study with NR ([REDACTED]) NR cannot do this work until July 2018 due to resource constraints
- [REDACTED] discuss with Motts, who are NR's approved consultants, about costs and time to produce this initial report
- **Motts has been appointed to undertake a high-level study to confirm that the aim is possible and the likely level of infrastructure costs to make the service operational**
- On completion, get a letter of confirmation from GWR stating that they will provide extra train services before and after the Arena events. **Supporting email received from GWR ([REDACTED])**

- **Car Parking**

- YTL to confirm the level of possible parking to the rear of the Brabazon Hangers and the access routes. YTL has confirmed that this will be for Crews, Acts and the associated transport requirements – up to 30 articulated lorries
- YTL to confirm when the access points into their development site will be completed. This has been confirmed.
- YTL to confirm what parking will be available, on their site, when the Arena opens (End 2022). YTL has demonstrated that it would be possible to park up to 3,000 vehicles on opening of the Arena. YTL is building a multi storey car park as part of their development, adjacent to the transport interchange
- SGC/BCC to confirm when the Park and Ride studies will be completed and when a decision on those to promote will be agreed. Still Awaited
- SGC/BCC to confirm when each of the agreed Park and Rides will be available and how they will be funded. Still Awaited
- SGC/BCC to write a statement of support confirming that they will work together to develop an acceptable transport strategy, based on the agreed list of possibilities, to service the Arena



<Department Name>  
<Brabazon Arena - Transport>

## MINUTES

Meeting	Date	Time	Location
Filton Arena – Transport Review	21 <sup>st</sup> March 2018	13.00	100 Temple Street
Attendees			
<div> <div></div> – South Gloucestershire Council (SGC) <div></div> – SGC – Transport Lead <div></div> – SGC – Transport DC <div></div> – Network Rail <div></div> – CH2M <div></div> – BCC Transport Lead <div></div> – BCC - PM </div>			
Apologies		CC	
<div></div> – CH2M		Colin Molton (CM) – BCC Peter Mann (PM) – BCC <div></div> - YTL	

### Agenda Items

1. Introductions
2. Aim of the Meeting
3. Presentation by CH2M of updated transport study
4. Programme review
5. Review, discuss and agree the transport infrastructure required to service the Arena and the funding
6. Discuss mitigation possible
7. AOB
8. Development of a Joint Agreement for the Cabinet paper

Agenda Item	Discussion Points/ Outcomes & Actions	Actions
1	<b>Introductions</b>	
	<div></div> introduced himself to the meeting and confirmed that he has been appointed by BCC to prepare a statement of support for the Brabazon Arena project proposed by YTL.  The Cabinet meeting is 1 <sup>st</sup> May 2018, so the time is very tight to get this report together. All parties will need to work together to promote and demonstrate a collaborative statement.	
2	<b>Aim of the Meeting</b>	
	<div></div> explained that the aim of this meeting is to review the CH2M transport report, explore the transport opportunities for servicing the	



Agenda Item	Discussion Points/ Outcomes & Actions	Actions
	Arena and agree to work together to develop a set of solutions.	
3	<b>CH2M Report</b>	
	<p>█ went through the report and highlighted the main issues, which are listed below. I have also added the required actions:</p> <p><b>General:</b></p> <ul style="list-style-type: none"> <li>• YTL to confirm total number of people expected to visit the Arena annually</li> <li>• YTL to confirm the expected number and size of events annually</li> <li>• YTL to confirm the expected time of the events</li> </ul> <p><b>Highways</b></p> <ul style="list-style-type: none"> <li>• Highway access into the Brabazon site from the A38 – To be discussed between SGC and BCC (CH2M) and possible solutions proposed</li> <li>• Highway access from Charlton Road (Extant permission) is to be considered by BCC (CH2M) and SGC</li> <li>• Access to the site to be discussed and agreed with BAE</li> </ul> <p><b>Rail</b></p> <ul style="list-style-type: none"> <li>• YTL/NR to design a platform for an arena event. This should be part of YTL's proposal and offer</li> <li>• A train service direct to Bristol Parkway, from Filton North, is essential. █ to review the options</li> <li>• Metro West is only planned to have a regular hourly service. █ to research the possibility of a ½ hourly service and then increased services for the main arena events (Brighton Arena puts on an increased rail service to move people in and out for the main events)</li> <li>• █ confirmed that there will be no possibility of putting on any more long-distance connections after 11.40pm, other than those in the latest timetable for 2018</li> </ul> <p><b>Park and Ride</b></p> <ul style="list-style-type: none"> <li>• The report suggests that using Park and Ride sites would not be possible due to the number of people that could be moved. This is not correct and needs to be reviewed. AC to get the scope of work corrected and CH2M to respond quickly</li> </ul> <p><b>Off – Street Parking</b></p> <ul style="list-style-type: none"> <li>• The Brabazon Hangers have a large area at the rear of the hangers that could be used for car parking</li> <li>• The report suggests that this could be used for general parking, coach parking, disabled parking, VIP parking and for event set-up parking</li> <li>• Adequate road access into the site is the issue. █ to look at possible options for providing a vehicular access into the Brabazon hangers and discuss with AC/█/█</li> <li>• █ to discuss, with YTL, their proposal for gaining access to the site.</li> </ul>	<p>█</p> <p>█</p> <p>█</p> <p>█/█</p> <p>█/█</p> <p>█</p> <p>█/█</p> <p>█</p> <p>█</p> <p>AC/█</p> <p>AC/█</p> <p>█/█</p>



Agenda Item	Discussion Points/ Outcomes & Actions	Actions
	<ul style="list-style-type: none"> <li>The report has assumed that 2,000 vehicles can be parked on site. AC to review and confirm if this is an acceptable assumption for the report</li> <li>█ to make contact with the Mall at Cribbs to review the parking possibilities on their existing car parks</li> </ul> <p><b>On – Street Parking</b></p> <ul style="list-style-type: none"> <li>Measures must be put in place to prevent indiscriminate on – street parking. A joint agreement between BCC and SGC required. AC/█ discuss with █</li> </ul> <p><b>Report Improvements</b></p> <ul style="list-style-type: none"> <li>AC stated that the report does not include what was requested and AC to clarify the scope and reissue to █</li> <li>█ feels that the report does not look at all the possible options and there has not been enough stakeholder engagement</li> <li>The report needs to look at the options, split the possibilities into phases and get agreement in principle from the stakeholders</li> </ul>	<p>█</p> <p>AC/█</p> <p>AC/█</p> <p>█</p> <p>█</p>
4	<b>Delivery and Operational Programme</b>	
	<p>█ issued a programme before the meeting and this is to be completed by YTL/BCC/SGC/NR</p> <ul style="list-style-type: none"> <li>█ to make contact with YTL and get them to confirm the required dates and information</li> <li>█ to respond to date queries within the programme</li> <li>The programme assume that the Brabazon Arena could be open in 2022 – YTL to confirm</li> <li>The programme assumes that Metro Bus(ii) and Metro West (ii) will be open and operational in 2021 – SGC/NR to confirm</li> </ul>	<p>█/█</p> <p>█</p> <p>█</p> <p>█/█</p>
5	<b>Transport Infrastructure needed to service the Brabazon Arena</b>	
	<p><b>Metro Bus (ii)</b></p> <ul style="list-style-type: none"> <li>SGC confirmed that this project is funded and will write a statement of confirmation for the report, with the planned opening date.</li> <li>█ to contact the operators, once appointed and get agreement in principle to providing extra buses before and after Arena events, subject to funding being agreed.</li> </ul>	<p>█</p> <p>█</p>
	<p><b>Metro West (ii)</b></p> <ul style="list-style-type: none"> <li>█ and █ confirmed that this project is funded at the current GRIP stage but with further GRIP stages to identify final costs. █/█ to confirm if the present levels of agreed funding are likely to be adequate for the existing design.</li> <li>█ confirmed that at present the infrastructure, including the signalling, is being designed for an hourly service</li> <li>█ suggested that the infrastructure should be designed for a ½ hourly service now. █ to discuss with █/SGC as the funding of any extra costs will need to be agreed before instruction</li> </ul>	<p>█/█</p> <p>█/█</p>

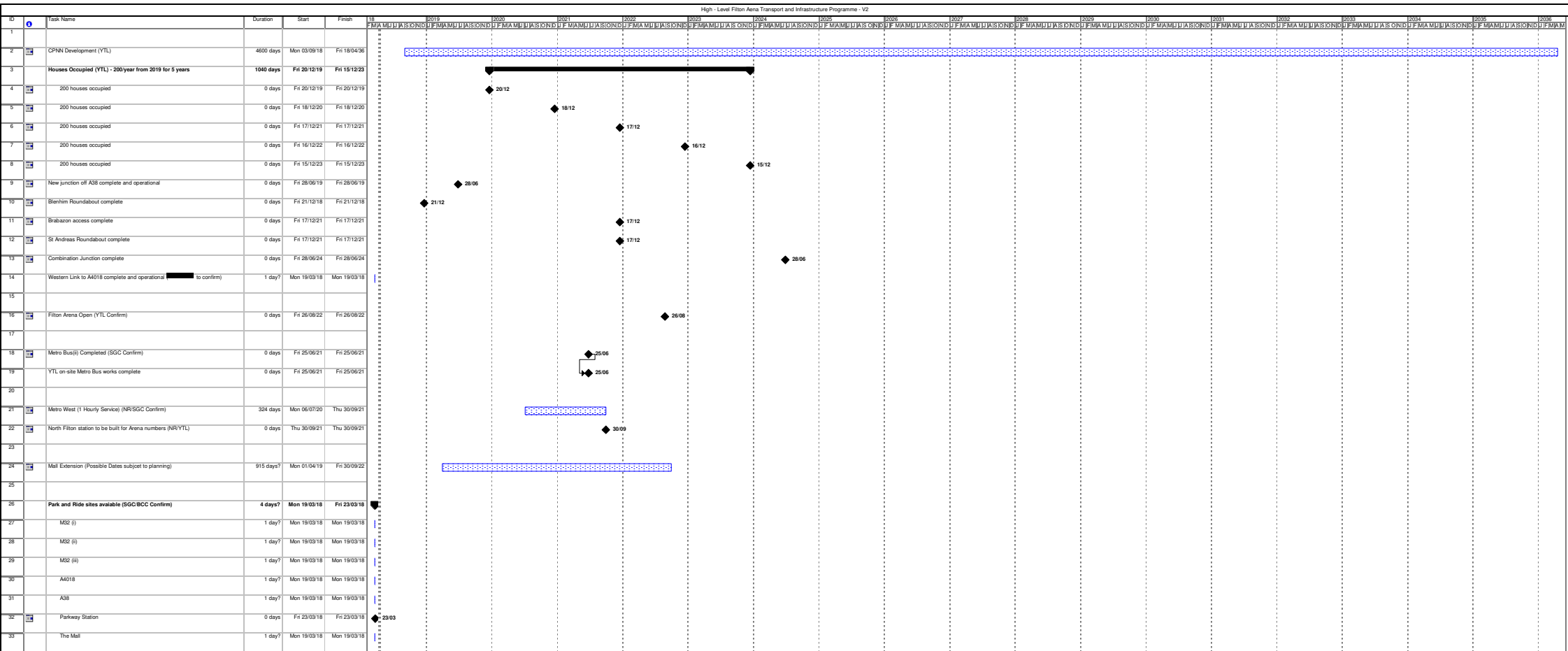


Agenda Item	Discussion Points/ Outcomes & Actions	Actions
	<ul style="list-style-type: none"> <li>• [REDACTED] to discuss with [REDACTED] the possibility of increased services for an Arena event</li> <li>• [REDACTED] confirmed that at present there are 5 freight passes /hour along this section of line</li> <li>• [REDACTED] confirmed that the platforms are being designed for a 5-car service</li> <li>• YTL/CH2M to confirm the likely Arena rail passenger flows so that the platform can be designed to cater for the extra people</li> </ul>	[REDACTED] [REDACTED]
	<b>Car Access</b> <ul style="list-style-type: none"> <li>• [REDACTED]/[REDACTED]/AC to review and confirm if a new vehicular access, into Brabazon, is possible</li> <li>• [REDACTED] to make contact with YTL about the possibilities and their proposals for improving access</li> </ul>	[REDACTED]/[REDACTED] AC [REDACTED]
	<b>Park and Rides</b> <ul style="list-style-type: none"> <li>• AC/[REDACTED] confirmed that a joint approach to park and ride provision has been agreed and the studies are being undertaken at the moment</li> <li>• AC/[REDACTED] to confirm when the outcome and proposals will be finalised</li> </ul>	AC/[REDACTED]
6	<b>Mitigation Options:</b>	
	<b>Rail (Metro West (ii))</b> <ul style="list-style-type: none"> <li>• It was agreed that for the late major events, rail will be a shuttle service between the Park and Ride sites and the Arena and to and from Temple Meads</li> <li>• [REDACTED] to confirm the extra costs for changing the design for a ½ hourly service now</li> <li>• Increase the usage as much as possible by putting on extra services for major events – agree possibilities with NR/GWR</li> <li>• Look for a direct link from North Filton to Parkway – [REDACTED] to discuss the scope of the study required to enable NR to make a decision in principle</li> <li>• Support in principle required from Network Rail and GWR (The Operator)</li> </ul>	Note [REDACTED] [REDACTED] [REDACTED] [REDACTED]
	<b>Bus (Metro Bus (ii))</b> <ul style="list-style-type: none"> <li>• It was agreed that for the late major events, Metro Bus could provide a shuttle service between the Park and Ride site and the Arena subject to agreeing funding</li> <li>• Increase the usage as much as possible by putting on extra services for major events – agree possibilities with /First</li> </ul>	Note [REDACTED]
	<b>Car Parking</b> <ul style="list-style-type: none"> <li>• SGC/BCC to consider a joint parking policy for the area around the arena</li> <li>• SGC/BCC to consider the Park and Ride strategy both for everyday usage and for the Arena events. All agreed that it would be best to use the same sites for both and just increase the parking provision and bus/rail services</li> </ul>	[REDACTED]/AC [REDACTED]/AC



Agenda Item	Discussion Points/ Outcomes & Actions	Actions
	<p><b>Phasing</b></p> <p><b>Phase 1</b> – Period from the opening of the Arena to completion and operation of the Park and Ride sites:</p> <ul style="list-style-type: none"> <li>• This assumes that Metro West (ii) and Metro Bus (ii) are both completed and operational and an agreement has been reached with the operators for increased services before and after the main events</li> <li>• Agree the level of parking at the Brabazon, with YTL, for Event Crews, Coach Parking, Disabled parking, VIP parking and maybe some general parking</li> <li>• Agree the access for the above with YTL and SGC/BCC</li> <li>• Agree possible parking with The Mall at Cribbs</li> <li>• Agree the principle of parking on the YTL site and walking across the green bridge. This will be possible due to the spare capacity as the development will not be completed until 2036</li> </ul>	<p>█/█</p> <p>█/AC</p> <p>█/█</p>
	<p><b>Phase 2</b> – Period from completion of the Park and Rides and the setting up of the connecting services, especially for the main events:</p> <ul style="list-style-type: none"> <li>• This assumes that Metro West (ii) and Metro Bus (ii) are both completed and operational and the increased services before and after the main events, are working and funded</li> <li>• Agree the level of parking at the Brabazon, with YTL, for Event Crews, Coach Parking, Disabled parking, VIP parking and maybe some general parking</li> <li>• Agree the access for the above with YTL and SGC/BCC</li> <li>• Assume <b>NO</b> parking at The Mall or on the YTL site</li> </ul>	<p>█/█</p> <p>█/AC</p>
7	<p><b>Any Other Business</b></p> <ul style="list-style-type: none"> <li>• It was agreed that Traffic and Parking demand restraint was a good idea, but could be difficult politically</li> <li>• This could assist with the funding of a Mass Transit system</li> <li>• Look at hotel capacity, both on opening and in the future. This could lead to an improved link with the City Centre</li> <li>• The possibility of using other car parks, such as local services and then providing a Park and Ride service</li> <li>• The possibility of setting up a Joint Control Centre was discussed but it will not be included within the scope of these meetings.</li> </ul>	<p>█/█</p> <p>█</p> <p>█</p>
8	<p><b>Joint Agreement for the Cabinet Paper</b></p> <ul style="list-style-type: none"> <li>• █ confirmed that he is looking for a joint statement from the Councils, BCC and SGC, confirming how they are and will continue to work together to support the services required to make the Arena a success. █ to draft a statement for comment.</li> <li>• █ also requires a joint statement from the other major stakeholders; YTL, First, GWR, confirming that they are behind the project and will work with the operators to make the project a success</li> </ul>	<p>BCC/ SGC</p> <p>█</p>





## **Filton Brabazon Arena (YTL Bristol Arena)**

### **Transport Options – April 2018**

1. On-Site parking at the rear of Brabazon Hangers for the Crews, Acts and associated staff, through the BAE vehicular access – This will provide improved security, health and safety and provision for a number of articulated trucks.
2. Parking on the Filton Airfield Site in a new Multi-Storey car park:
  - a) VIP
  - b) Disabled Parking
  - c) May be some general public (Expensive price)
3. Provision of a modal transport interchange on the Filton Airfield site, to include Rail, MetroBus, other local bus services and car parking.
4. Coach Parking on Filton Airfield site at the transport interchange, for National and Private Hire coaches as well as providing the link to the Park and Ride sites.
5. Parking at The Mall – Car Park H would be acceptable to The Mall subject to separate security and management, which will be provided by YTL.
6. Completion and operation of MetroBus (ii) in 2021, as planned.
7. Agreement of increased bus services, both before and after, for Arena events with First Bus. Locations to be agreed.
8. Completion and operation of Metro West 2 (MW2), in 2021 as planned.
9. Discuss the possibility of increasing the hourly service to half-hourly. What would be the effect on the costs and delivery date of MW2?
10. Agreement of increased rail services, both before and after, for Arena events with GWR. Locations to be agreed.
11. A new rail link from Brabazon to Bristol Parkway, through the Stoke Gifford triangle. A high-level review of the options, costs and timeline is being undertaken at the moment.
12. Use of existing Park and Ride sites:
  - a) Bristol Parkway station
  - b) Portway Park and Ride
13. Review and agreement, jointly between BCC and SGC, of the development and location of new Park and Ride sites. This is being carried out at the moment.
14. Agreement of a joint parking policy, between SGC and BCC, for the area around the Arena, both SGC and BCC wards.
15. Research the possibility of setting up a joint Traffic and Parking demand restraint strategy.
16. Research the possibility of setting up a joint Traffic Control Centre, for BCC and SGC. This is to be operated by both BCC and SGC.



**Subject** Brabazon Hangar Economic Impact Assessment Model

**Date** 20 December 2017

**Job No/Ref** 258428-00

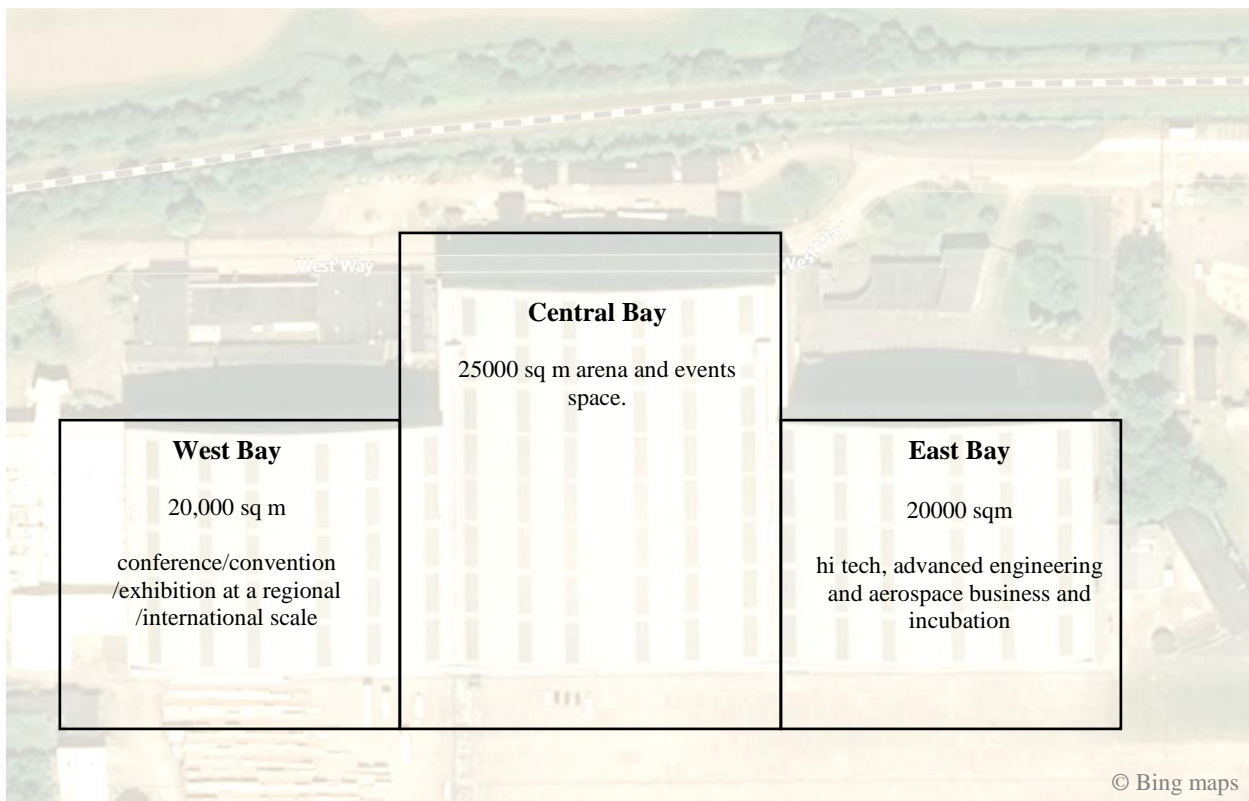
**This note provides an initial analysis of the potential direct and indirect employment and gross value added (GVA) impacts associated with the adaptive re-use of Brabazon Hangars from a former post war civilian aircraft assembly hall to its re-purposing to a place for the assembly of people for events, live entertainment, conferencing and exhibitions for the City of Bristol and West of England regional economy and its core and growth sectors including options for either a 12,000 or 15,000 capacity multi-purpose venue.**

Arup has been commissioned by YTL Developments to develop an economic model to assess the potential employment and GVA impact of the Brabazon Hangars adaption on the local economy. Although the model is still under development and work in progress, this note sets out a very early initial analysis of the potential economic impact of the adaption of the Brabazon Hangars on the West of England economy. The early stage analysis undertaken has focussed on the direct and indirect employment and GVA impacts of the re-purposing of the Brabazon Hangars. At this stage no modelling of the catalytic effect on the wider Filton Economic Area, or beyond, has been made. Further scenario development and detailing is required to underpin that aspect of the economic model. The catalytic potential that a regional events space, and the visitor numbers associated with it, could attract in this location requires further consideration. The potential leverage and transformational momentum that could be achieved through accelerated and additional delivery of housing units and commercial space in the wider Filton Economic Area across the borders of South Gloucestershire & the Bristol area needs further consideration. Our understanding is that the Airfield has the potential to significantly increase its housing and commercial floorspace delivery through an injection of infrastructure investment that not only will enable the transformation of the wider connectivity of this part of the City but facilitate substantial economic growth including that of the Brabazon proposition.

As part of this work, Arup has reviewed the *Bristol Arena Full Business Case*, April 2016 (BCC) and the *Environmental Statement Technical Appendix 17B: Economic Effects*, November 2015 (Amion Consulting).

The economic model under development (and commissioned to be delivered in early 2018) will allow YTL to consider the potential economic impact of different land use and development scenarios centred on the redevelopment of the Brabazon Hangar. Brabazon constitutes three hangars. The Central Hangar is proposed to be a multi-purpose 12,000 or 15,000 capacity horseshoe live entertainment and sports venue, somewhat similar to that proposed at Arena Island yet unique in its own presentation to region and the market. The Central Hangar supports the redevelopment of the West and East hangars. The Western Hangar will deliver an alternative conferencing, convention and exhibition space ancillary to the Central Hangar. The Eastern Hangar will accommodate a business and incubation venue including scale up space aimed at the advanced engineering and aerospace clusters. The optimum mix of uses is still to be determined, but for the purposes of this initial employment and GVA analysis, the floor-space and use assumptions outlined in Figure 1 below have been used and these are all GIA.

**Figure 1: Indicative Hangar Use**



The scale of the Central Bay allows for a higher capacity arena (up to 15,000 capacity) than the 12,000-seater Arena Island proposition at Temple Quarter Enterprise Zone.

The following caveats should be noted on the current work in progress given these are high level numbers with a more detailed model being developed for January:

- Supply chain jobs need further assessment, this is a high level assumption and will need refinement with regards to leakage, displacement and dead weight.
- The net additional jobs in the West of England need further assessment with regards to leakage and displacement.
- The GVA per annum has been calculated using the ONS average for the region at circa £23k, this number needs further refinement especially with regards to type of employment, which will impact the cumulative discounted net additional value.
- Our cumulative net GVA has also used £23k per capita and has been modelled over a 10 year period, we have used our methodology on the figures to show 10 years on the Amion numbers
- It is not clear how the net additional GVA has been calculated by Amion and therefore a comparison cannot be provided in the table over their 25 year period so we have left it as n/a
- We understand that the Brabazon venue has the potential to deliver more events (circa 60 events per annum in the East and West bay hangars) including live events and conferences. The model has not been updated to reflect this yet so the visitor numbers are likely to increase which will have an upward impact on off-site visitor expenditure and associated jobs and the value for money calculations.
- The assessment does not yet include the potential catalytic effects on development of Filton Airfield and other adjacent Enterprise Area sites.

An exacting comparable like for like analysis is therefore difficult to complete due to the above.



		BTQEZ Arena 12,000	Brabazon Arena 12,000 Arup analysis 2017 based on Amion Arena Island analysis	Brabazon Arena & East & West Hangar 15,000 Arup analysis 2017 based on Amion Arena Island analysis	Notes
Construction Phase					
Temporary Phase Employment (FTE)		69	93	171	
Net Additional Temporary Construction Jobs (FTE)		42	57	104	
Permanent Employment Impact					
Number of events (Per Annum) by Year 3		122	122	122	
Number of Visitors (Per Annum)		559,700	559,700	699,625	
Off-site Visitor Expenditure (£m)		22	22	25	
Number of jobs	Full time	37	37	54	
	Part time	300	300	444	
	Total (FTE)	160	160	237	
Gross off site Jobs (FTE)		622	622	720	
Gross extra hangar jobs exhibition & conference, advanced tech business space and (FTE)		n/a	n/a	500	
Gross Supply Chain (FTE)		235	272	404	Based on a multiplier of 1.42 our model is returning higher supply chain impact.
Gross Project Permanent Employment (FTE)		1017	1054	1861	Sum of four values above
Gross Arena GVA (£m per annum)		23	25	43	
Net Additional Jobs in WoE		548	548	1109	Additionality assumptions used comparable to Amion with exception of leakage which comes from separate Journey to work analysis.
Cumulatively Discounted Additional GVA (£m) – <u>25 year period</u>		298	n/a	n/a	Arup have not been able to ascertain how Amion have arrived at a £298 million discounted GVA figure based on £22.8m annual benefit. They have also used a 25 year period which we have not applied to our model
Cumulatively Discounted Additional GVA (£m) – <u>10 year period</u>		115	115	235	Arup instead used a 10 year period and have applied the same GVA per capita, for comparative purposes we have applied our calculation for the 10 year period to the Amion figures
Benefit/Cost – NOTE no differentiation as to the quantification of public or private investment has been made – hence this is not a VFM calculation on the use of public funds					
Total Benefit (£m)		115	115	235	The Amion figure for BTQEZ includes construction GVA which Arup have excluded.
Total Capital Cost (£m) at FBC					
Total Capital Cost (£m) at current		156	120	156	Costs for the Brabazon proposal including the 15,000 arena include the additional cost associated with the East and West hangars (note BTQEZ has far higher requirement for public investment)
Benefit : Cost = Benefit/Cost (less than 1 is negative)		0.7	1.0	1.5	
NPV (£m) = Benefit - Cost		-41	-5	79	





## DRAFT EMAIL TO MARVIN REES

Dear Marvin

I am writing to confirm that if a decision is made not to proceed with the proposed arena in Temple Quarter, we will commit to take forward proposals to deliver an alternative arena and associated facilities within the Brabazon hangar complex, adjacent to Filton airfield.

Such an arena would be totally funded by private investment, although if Bristol City Council wishes to have a small equity stake, we would be happy to discuss such an arrangement.

YTL Land & Property UK would take full responsibility for delivering the arena. We have undertaken initial feasibility studies which indicate that it should be possible to create a 16,000-capacity arena within the central Brabazon hangar. This would be the third largest UK arena so putting it in the top tier for events. YTL Land & Property is part of the international YTL Group. Within the UK, YTL have over £2.5 billion of assets which include Wessex Water, GENeco, hotels and spas and a major housing and commercial development on the Filton airfield site.

Whilst the arena would be privately financed, constructed and operated, we would need public sector co-operation to ensure that three key public sector transport projects are delivered. The projects are the rail link between Bristol Temple Meads and Filton; Metrobus Phase 2 and a rail link from Parkway station to Filton. Two of these projects are already in the public investment programme and the third is under discussion. These projects are important in improving public transport provision in North Bristol and South Gloucestershire, but will also enable visitors to the arena to make maximum use of public transport.

If the decision is made not to proceed at Temple Quarter, we would envisage an initial exclusivity period during which we would work with the public sector to confirm timing and delivery of the transport schemes. During this time, we would also commission outline designs and determine a firm project delivery programme. Subject to there being no major obstacles identified during the exclusivity period, we would anticipate a maximum of three years for construction and delivery of the arena and associated facilities.

I hope this is helpful. If you would like any further clarification, please let me know.

Very best wishes.



## **Integrated Infrastructure Investment Plan - Maximisation of Delivery along the Bristol and South Glos Economic Area**

We suggest there are three thrusts to this maximisation.

1. Deliver a place based response to the industrial strategy, focussing on the Aero and Advanced Engineering and Construction Sectors.
2. Deliver an increased housing and commercial density on the Filton Airfield Site
3. Deliver a major MICE venue at the Brabazon Hangars (meetings, incentives, conferencing & entertainment) asset for the city & region. The MICE asset would be based around the delivery of a 12000 – 15000 capacity multi functioning sports and entertainment venue/arena.

The layering of these three elements and the linking of their underpinning economic sectors and physical connectivity to both the region and the city centre, we believe, is a great opportunity for the smart growth of the region's economy, it's joint spatial planning and its delivery. The Filton site and wider area has the opportunity to be an exemplar development in the UK but it needs an Integrated Infrastructure Investment Plan (IIIP) to maximise the joint leverage of both private and public investment.

We have taken the opportunity to set out a high level investment portfolio to secure this maximised position. This is a work in practice. We have not yet done the exacting economic or technical analysis to validate the depth and deliver of this investment portfolio. However we would expect the additionality of the triple layering to create a gross amount of development to be in excess of £3.0BN – this will greatly boost Regional GVA, through construction, jobs and innovation.

### **Integrated Infrastructure Investment Plan (IIIP): Mobility, Economic Development & Wellbeing**

#### Public Transport & Mobility

- Accelerated delivery of Cribbs Patch Way Metrobus Extension: £ 32M
- Accelerated delivery of Combination Junction Filton Airfield: £ 15M
- Accelerated delivery of Filton Triangle Rail Connectivity including signalling and track works allowing direct access from Henbury line, via Filton North straight through to Parkway Station: £ 15m
- Enhancement of Filton North Station (taking longer trains (6 car turbo) for the wider area and events & greater passenger numbers): £ 10M
- Station Enhancements Parkway: £ 5M
- Provision of new super cycle highway and bike storage hubs on A38 corridor to link Bristol City Centre to Cribbs Causeway : £ 10M
- Public realm delivery to ensure active travel is enhanced to and from the regional sites to major locations, specifically walking & cycling : £ 15M

- Brabazon Park Public Bridge to allow access to Brababzon Venue: £ 10M

#### **MOBILITY SUB TOTAL**

**£ 112M**

#### Sustainable Economic Development

- MERLINS; Mobility, Energy, Re-use, Lending (sharing) & Innovation Nodes - 5 facilities which aid the “smart neighbourhood” – meaning the live, work, visit needs of the site and wider area: £ 60M
- Superfast connectivity on site  
(to aid use of Smart City Technology to drive/charge CAV, increase use of technology boards/ hoardings/ marketing & sales): £ 5M
- Energy from Waste Heating pipework and Network – possible funding via HNDU and HNIF: £ 20M
- Integrated sustainable networks e.g. PVs, Energy Battery/Charging Grids etc: £ 15M
- Infrastructure (Utilities) costs for 2 additional hangars development, bringing them back into new economic use: £ 15M
- Site-wide remediation works and cut and fill works: £ 7M
- Off Site Residential Manufacturing and Construction Waste and Logistics Centre: £ 7M
- Additional Site Assembly to secure further residential and commercial growth: £ 15M

#### **ECONOMIC DEVELOPMENT SUB TOTAL**

**£ 144M**

#### Wellbeing

- Public Realm Delivery to maximise active travel is enhanced to and from the site to major locations: £ 15M
- Construction of new public park called Brabazon Gardens to provide new direct pedestrian route between Brabazon Venue and Cribbs Causeway/Mall: £ 26M

#### **WELLBEING SUB TOTAL**

**£ 41M**

**TOTAL £297M**